WHAT IS CLAIMED IS:

1. Linear operating device having an assembly for converting a rotational motion to a translational motion, said assembly comprising a nut, a rotating drive unit and a spindle, acting in conjunction with the nut, and the nut being rotatably attached to the spindle, wherein the rotating drive unit is connected rotatably fixed to the nut.

2. Linear operating device according to claim 1, wherein the rotating drive unit is a motor.

3. Linear operating device according to claim 1, wherein the rotating drive unit is a spring.

4. Linear operating device having a converter for converting a rotational motion into a translational motion, said converter comprising a nut, a rotating drive unit and a spindle, acting in conjunction with the nut, and the nut being rotatably attached to the spindle, wherein the rotating drive unit exercises a force in an axial direction of the spindle on an area of the spindle which acts in conjunction with the nut.

5. Linear operating device according to claim 4, wherein the rotating drive unit is an elastic element.

6. Linear operating device according to claim 4, wherein the spindle is extensible while subject to a pre-stress.

7. Linear operating device according to claim 5, wherein the spindle is extensible while subject to a pre-stress.

8. Linear operating device according to claim 4, wherein at least one spring element is the rotating drive unit which applies a pre-stress upon the spindle.

9. Linear operating device according to claim 5, wherein at least one spring element is the rotating drive unit which applies a pre-stress upon the spindle.

10. Linear operating device according to claim 6, wherein at least one spring element is the rotating drive unit which applies a pre-stress upon the spindle.

11. Linear operating device according to claim 1, wherein the nut has an operative connection with the spindle via rolling bodies.

12. Linear operating device according to claim 4, wherein the nut has an operative connection with the spindle via rolling bodies.

13. Linear operating device according to claim 5, wherein the nut has an operative connection with the spindle via rolling bodies.

14. Linear operating device according to claim 6, wherein the nut has an operative connection with the spindle via rolling bodies.

15. Linear operating device according to claim 8, wherein the nut has an operative connection with the spindle via rolling bodies.

16. Linear operating device according to claim 11, wherein the rolling bodies are rollers or balls.

17. Linear operating device according to claim 1, wherein the nut is connected rotatably fixed to a first lock device which is connectable, detachably and rotatably fixedly, to a complementary lock device.

18. Linear operating device according to claim 2, wherein the nut is connected rotatably fixed to a first lock device which is connectable, detachably and with torsional strength, to a complementary lock device.

19. Linear operating device according to claim 4, wherein the nut is connected rotatably fixed to a first lock device which

is connectable, detachably and rotatably fixedly, to a complementary lock device.

20. Linear operating device according to claim 5, wherein the nut is connected rotatably fixed to a first lock device which is connectable, detachably and rotatably fixedly, to a complementary lock device.

21. Linear operating device according to claim 6, wherein the nut is connected rotatably fixed to a first lock device which is connectable, detachably and rotatably fixedly, to a complementary lock device.

22. Linear operating device according to claim 8, wherein the nut is connected rotatably fixed to a first lock device which is connectable, detachably and rotatably fixedly, to a complementary lock device.

23. Linear operating device according to claim 11, wherein the nut is connected rotatably fixed to a first lock device which is connectable, detachably and rotatably fixedly, to a complementary lock device.

24. Linear operating device according to claim 16, wherein the nut is connected rotatably fixed to a first lock device which is connectable, detachably and rotatably fixedly, to a complementary lock device.

25. Linear operating device according to claim 17, wherein the first lock device has a projection or a recess on a surface, and wherein the complementary lock device has a form which is complementary to the projection or the recess.

26. Linear operating device according to claim 19, wherein the first lock device has a projection or a recess on a surface, and wherein the complementary lock device has a form which is complementary to the projection or the recess.

27. Linear operating device according to claim 20, wherein the first lock device has a projection or a recess on a surface, and wherein the complementary lock device has a form which is complementary to the projection or the recess.

28. Linear operating device according to claim 22, wherein the first lock device has a projection or a recess on a surface, and wherein the complementary lock device has a form which is complementary to the projection or the recess.

29. Linear operating device according to claim 24, wherein the first lock device has a projection or a recess on a surface, and wherein the complementary lock device has a form which is complementary to the projection or the recess.

30. Linear operating device according to claim 1, wherein the spindle and the nut are arranged in respective mountings which are tiltable.

31. Linear operating device according to claim 2, wherein the spindle and the nut are arranged in respective mountings which are tiltable.

32. Linear operating device according to claim 4, wherein the spindle and the nut are arranged in respective mountings which are tiltable.

33. Linear operating device according to claim 5, wherein the spindle and the nut are arranged in respective mountings which are tiltable.

34. Linear operating device according to claim 6, wherein the spindle and the nut are arranged in respective mountings which are tiltable.

35. Linear operating device according to claim 8, wherein the spindle and the nut are arranged in respective mountings which are tiltable.

36. Linear operating device according to claim 17, wherein the spindle and the nut are arranged in respective mountings which are tiltable.

37. A spacecraft comprising a linear operating device having an assembly for converting a rotational motion to a translational motion, said assembly comprising a nut, a rotating drive unit and a spindle, acting in conjunction with the nut, and the nut being rotatably attached to the spindle, wherein the rotating drive unit is rotatably fixedly connected to the nut.

38. A spacecraft comprising a linear operating device according to claim 37, wherein the rotating drive unit is a motor.

39. A spacecraft comprising a linear operating device having a converter for converting a rotational motion into a translational motion, said converter comprising a nut, a rotating drive unit and a spindle, acting in conjunction with the nut, and the nut being rotatably attached to the spindle, wherein the rotating drive unit exercises a force in an axial direction of the spindle on an area of the spindle which acts in conjunction with the nut.

40. A spacecraft comprising a linear operating device according to claim 39 wherein the rotating drive unit is an elastic element.

41. A spacecraft comprising a linear operating device according to claim 39, wherein the spindle is extensible while subject to a pre-stress.

42. A spacecraft comprising a linear operating device according to claim 39, wherein at least one spring element is the rotating drive unit which applies a pre-stress upon the spindle.

43. A spacecraft comprising a linear operating device according to claim 37, wherein the nut has an operative connection with the spindle via rolling bodies.

44. A spacecraft comprising a linear operating device according to claim 37, wherein the nut is connected with torsional strength to a first lock device which can be connected, detachably and with torsional strength, to a complementary lock device.

45. A spacecraft comprising a linear operating device according to claim 44, wherein the first lock device has a projection or a recess on a surface, and wherein the complementary lock device has a form which is complementary to the projection or the recess .

46. A spacecraft according to claim 37, wherein the rotating drive unit is connected with the spacecraft, and wherein the spindle is attached rotatably fixed to detachable, extensible or unfoldable mechanisms of the spacecraft.

47. A spacecraft according to claim 46, wherein the spindle is connected to a solar generator unit or to an antenna device.

48. A solar generator unfolding system comprising a linear operating device having an assembly for converting a rotational motion to a translational motion, said assembly comprising a nut, a rotating drive unit and a spindle, acting in conjunction with the nut, and the nut being rotatably attached to the spindle, wherein the rotating drive unit is rotatably fixedly connected to the nut.

49. A solar generator unfolding system comprising a linear operating device according to claim 48, wherein the rotating drive unit is a motor.

50. A solar generator unfolding system comprising a linear operating device having a converter for converting a rotational motion into a translational motion, said converter comprising a nut, a rotating drive unit and a spindle, acting in conjunction with the nut, and the nut being rotatably attached to the spindle, wherein the rotating drive unit exercises a force in an axial direction of the spindle on an area of the spindle which acts in conjunction with the nut.

51. A solar generator unfolding system according to claim 50, wherein the rotating drive unit is an elastic element.

52. A solar generator unfolding system according to claim 50, wherein the spindle is extensible while subject to a pre-stress.

53. A solar generator unfolding system according to claim 50, wherein at least one spring element is the rotating drive unit which applies a pre-stress upon the spindle.

54. A solar generator unfolding system according to claim 48, wherein the nut has an operative connection with the spindle via rolling bodies.

55. A solar generator unfolding system according to claim 48, wherein the nut is connected rotationally fixed to a first lock device which can be connected, detachably and rotatably fixedly, to a complementary lock device.

56. A solar generator unfolding system according to claim 55, wherein the first lock device has a projection or a recess on a surface, and wherein the complementary lock device has a form which is complementary to the projection or the recess.

57. A solar generator unfolding system according to claim 48, wherein the linear operating device is part of a hold-down and release system for unfolding a solar generator unit.

58. A solar generator unfolding system according to claim 57, wherein the nut is connected to a support structure of the solar generator unit, and wherein the spindle is connected with an outermost panel element of the solar generator unit.

59. A solar generator unfolding system according to claim 58, wherein the spindle is arranged inside a first mounting which is tiltable relative to the outermost panel element of the solar generator unit, and wherein the nut is arranged in a second mounting which is tiltable relative to the support structure.

60. Method of making a linear operating device comprising:

providing an assembly for converting a rotational motion to a translational motion,

providing a rotating drive, a nut and a spindle for the assembly,

rotatably attaching the nut to the spindle so that the spindle acts in conjunction with the nut, and

rotatably fixing the rotating drive unit to the nut.

61. A method according to claim 60, wherein the rotating drive unit is operatively connected to the nut so that the rotating drive unit exercises a force in an axial direction of the spindle on an area of the spindle which acts in conjunction with the nut.

62. A method according to claim 60, wherein the nut has an operative connection with the spindle via rolling bodies.

63. Method of making a spacecraft having a linear operating device, comprising:

providing a converter for converting a rotational motion into a translational motion,

providing a nut, a rotating drive unit and a spindle for the converter, and

rotatably attaching the nut to the spindle so that the spindle acts in conjunction with the nut,

wherein the rotating drive unit exerts a force in an axial direction of the spindle directly on an area of the spindle acting in conjunction with the nut.

64. A method according to claim 63, wherein the rotating drive unit is connected with the spacecraft, and wherein the spindle is attached rotatably fixed to detachable, extensible or unfoldable mechanisms of the spacecraft.

65. A method of making a solar generator unfolding system with a linear operating device having a converter for converting a rotational motion into a translational motion, comprising:

providing the converter for converting the rotational motion into the translational motion,

providing a nut, a rotating drive unit and a spindle for the converter, and

rotatably attaching the nut to the spindle so that the spindle acts in conjunction with the nut,

wherein the rotating drive unit exerts a force in an axial direction of the spindle directly on an area of the spindle acting in conjunction with the nut.

66. A linear drive having an assembly for converting a rotational motion to a translational motion, said assembly comprising:

a spindle,

a nut rotatably connected to the spindle, and

a rotating drive unit rotatably fixed to the nut,

wherein the drive unit rotates the nut, and the nut linearly moves the spindle, the spindle being detachable from the nut.

67. A linear operating device according to claim 66, wherein a second rotating drive unit is provided which exerts a force in an axial direction of the spindle on an area of the spindle that is operatively connected to the nut thereby rotating the nut..

68. A linear operating device having an assembly for converting a rotational motion into a translational motion, said assembly comprising:

a spindle,

a nut rotatably connected to the spindle, and

a rotating drive unit exerting a force in an axial direction of the spindle directly on an area of the spindle that is operatively connected to the nut to thereby rotate the nut and linearly move the spindle,

wherein the spindle is pre-stressed in an axial direction.